

Listing of Claims:

Claims 1-13 (cancelled)

Claim 14 (new) A method of determining the calciotropic activity of a preparation of algae of the genus *Padina pavonica*, selected from the group consisting of an extract of algae and a powder of algae, relating to the fixation of calcium by bone cells which consist of culturing a human or animal cell line or osteoblasts in a culture medium rich in calcium ions in a well plate, adding to said culture medium after complete development an extract or a powder of said algae *Padina pavonica*, thereafter eliminating calcium ions brought by the culture medium, acidifying the culture medium in order to destroy the extracellular matrix formed by the bone cells, thereafter filtrating, determining the concentration of the fixed calcium ions in the osteoblasts in comparison with a calibration scale of a known activator of the fixation of calcium or in the presence of an inhibitor of the fixation of calcium or both.

Claim 15 (new) The method of claim 14, wherein the results of the calculation of calciotropic activity are expressed in comparison with the results obtained with a determined amount of an active compound known to promote calcium uptake by the osteoblasts.

Claim 16 (new) The method of claim 14, wherein the results of the calculation of calciotropic activity are expressed comparatively to the known effects of a determined amount of estradiol.

Claim 17 (new) The method of claim 14, wherein the cells are a suspension of human or animal osseous cells having a cell density as determined by turbidimetry or by cell density calculation based on a reference value.

Claim 18 (new) The method of claim 14, wherein the complete culture medium, then a deleterious agent inhibiting the fixing of calcium, are added to each well, thereafter a set volume of dispersion of extract or powder of algae to be tested, is added to the medium, and the medium is let to incubate at 37°C in an atmosphere of carbon dioxide for one to three days.

Claim 19 (new) A method of claim 14, wherein the supernatant fractions are separated from the medium, after incubation, the cells are rinsed with a medium devoid of calcium and magnesium, the volume of the fractions is adjusted with a fixed volume of a buffering agent capable of eliminating all the calcium in solution then adding an acidic agent to destroy the extracellular matrix produced by the cells and then calcium fixed by the bone cells is determined in the liquid phase.

Claim 20 (new) A method of claim 14, wherein estradiol is used as the reference product.

Claim 21 (new) A method of claim 14, wherein the inhibitor of the fixing of the calcium is a pro-inflammatory agent.

Claim 22 (new) A method of claim 14, in which the inhibitor of the fixing of the calcium is a pro-inflammatory agent such as interleukin IL-1.

Claim 23 (new) A method of claim 14, wherein the inhibitor of the fixing of the calcium is an agent which blocks the calcium channels.

Claim 24 (new) The method of claim 14, in which the inhibitor of the fixing of the calcium in the bone cells is an agent which blocks the calcium channels selected from the group consisting of Verapamil and Cinchonine.

Claim 25 (new) Titrated extracts or titrated powders of the algae *Padina pavonica* with an amount of approximately 250 µg and having a calcium fixing activity comparable to a known amount of a reference calciotropic agent.

Claim 26 (new) The titrated extracts or titrated powders of the algae *Padina pavonica* of claim 14, wherein the reference calciotropic agent is estradiol.